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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/644,494	08/19/2003	Alkinoos Hector Vayanos	020688	7416	
23696 75	590 10/20/2005		EXAMINER		
QUALCOMN	•	ORGAD	ORGAD, EDAN		
5775 MOREHOUSE DR. SAN DIEGO, CA 92121			ART UNIT	PAPER NUMBER	
,			2684	2684	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/644,494	VAYANOS ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Edan Orgad	2684			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
2a)⊠	2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.					
Disposition of Claims  4) □ Claim(s) 1-27 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) 1-11 is/are allowed.  6) □ Claim(s) 12,13,23 and 24 is/are rejected.  7) □ Claim(s) 14-22 and 25-27 is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
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2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da  5) Notice of Informal P  6) Other:				

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#### **DETAILED ACTION**

#### Response to Arguments

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12, 13, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (US 2002/0105929).

Regarding claims 12 and 23, Chen teaches a communications apparatus for transmitting a payload of data bits encoded in a data packet as a plurality of systematic symbols and redundancy symbols (¶ 0112, 0113 & 0123-0124), comprising: transmitter configured to transmit to a remote location a first subpacket containing the systematic symbols and a first portion of the redundancy symbols level followed by a second subpacket containing a second portion of the redundancy symbols (¶ 0133); and a processor configured to select a transmission format for the second subpacket as a function of a computed level of expected energy received at the remote location due to transmission of the first subpacket (¶ 0133-0134).

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Regarding claims 13 and 24, Chen teaches the processor is further configured to compute the level of expected energy received at the remote location due to transmission of the first subpacket as a function of the number of symbols contained in the first subpacket (¶ 0133).

## Allowable Subject Matter

Claims 14-21 and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 14 and 25, the prior art of record fails to specifically disclose computing a target transmission energy level as a function of the total number of symbols contained in the first and second subpackets.

Regarding claim 16, the prior art of record fails to specifically disclose the processor is further configured to adjust the computed level of expected energy received at the remote location due to transmission of the first subpacket as a function of expected losses at the remote location relating to de-mapping the first subpacket.

Regarding claims 18 and 27, the prior art of record fails to specifically disclose an encoder configured to encode the first subpacket at a first coding rate and the second subpacket at a second coding rate higher than the first coding rate.

Regarding claim 26, the prior art of record fails to specifically disclose the target transmission energy level by the determining means is further a function of a coding rate of the combined first and second subpackets.

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Claims 1-11 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the prior art of record fails to specifically disclose a method of transmitting a payload of data bits, comprising encoding the payload of data bits to generate a data packet containing systematic symbols replicating the data bits and redundancy symbols transmitting a first subpacket containing the systematic symbols and a first portion of the redundancy symbols to a remote location in response to receiving a NAK message from the remote locations transmitting a second subpacket containing a second portion of the redundancy symbols to the remote location in accordance with a transmission format selected as a function of a computed expected total energy received at the remote location due to transmission of the first subpacket.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The

examiner can normally be reached on 8:00AM to 5:30PM with every other Friday off...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD
PATENT EXAMINER/TELECOMM.

6,0, 14/1/25